

ABSTRACT

Disclosed herewith a compact linear motor provided with a plurality of magnetic pole teeth and used to increase the thrust force by canceling a magnetic attractive force working between the primary member and the secondary member. The linear motor comprises a primary member and a secondary member. The primary member includes cores formed with a magnetic material and an electromagnetic coil wound on the cores while the secondary member supported so as to be capable of moving relatively with respect to the primary member with a gap therebetween. In the linear motor, the coil that is wound commonly on the cores is also disposed between adjacent magnetic pole teeth.